FACT SHEET

PROPOSED RULE SETTING THE STANDARDS OF PERFORMANCE FOR UTILITY-INDUSTRIAL-COMMERCIAL-INSTITUTIONAL STEAM GENERATING UNITS

ACTION

- On February 9, 2005, the Environmental Protection Agency (EPA) proposed amendments to existing regulations that would reduce emissions of criteria air pollutants from utility, industrial, commercial, and institutional steam generating units. Criteria air pollutants are found throughout the country and include: nitrogen oxides (NO_x), ozone (O_3), sulfur dioxide (SO_2), particulate matter (PM), carbon monoxide (CO), and lead (Pb).

- Utility steam generating units are located at electric power generating stations that burn fossil fuels. Industrial, commercial, and institutional boilers are located at industrial sites, commercial, and institutional sites (e.g., college or university; office building; hospital; hotel; town, city, county, State or Federal government; etc.) which burn fossil fuels, wood, or municipal-type solid waste.

- The proposed rules would amend emission standards for the following three air pollutants from *utility* units: particulate matter (PM), sulfur dioxide (SO_2), and nitrogen oxides (NO_x). The proposed rules also would amend PM emission standards from *industrial, commercial, and institutional* units.

- The emission limits in the proposed rules are based on levels that can be achieved by installing emissions control equipment known as fabric filters for PM control, wet scrubbers for control of SO_2, and selective catalytic reduction for control of NO_x. Other emission control technologies could also be used, as long as they meet the required emission limits.

- The proposed rules consist of new source performance standards (NSPS) for new (built after February 9, 2005), modified, and reconstructed utility, industrial, commercial, and institutional steam generating units.

- The proposed amendments would substantially tighten the existing NSPS. The existing and proposed utility NSPS are shown below along with the percent decrease for each pollutant.

Pollutant	Existing NSPS	Proposed NSPS	Percent Decrease
NO_X	1.6 lb/MWh	1.0 lb/MWh	38%

SO_2*	0.6 lb/MMBtu	2.0 lb/MWh	~65%
PM	0.03 lb/MMBtu	0.015 lb/MMBtu	50%

* The existing SO_2 standard has an alternate compliance limit for high sulfur coals.

- For the industrial, commercial, and institutional boiler NSPS, the only proposed amendment is to the PM standard. The proposed standard is consistent with the recently promulgated boiler national emission standards for hazardous air pollutants, 0.03 lb/MMBtu. The only units impacted by the change in the PM limit will be units fueled by wood. The existing PM limit for wood fired units is 0.1 lb/MMBtu and the proposed standard would represent a 70% reduction in the PM limit.

- New utility, industrial, commercial, and institutional steam generating units must demonstrate compliance with emission standards in the NSPS upon commercial start-up.

- Comments may be submitted on this action for 60 days following publication of the proposed rules in the Federal Register.

HEALTH/ENVIRONMENTAL BENEFITS

- EPA estimates total criteria pollutant reductions of almost 11,000 tons per year (compared to the existing NSPS) in the fifth year after implementation. The emissions reductions by pollutant are listed below:

Pollutant	Emissions Reductions
NO_x	1,400 tons per year
SO_2	8,400 tons per year
PM	1,500 tons per year

- Scientific studies show links between exposure to fine particulate matter (PM) and a number of adverse health effects, including breathing problems and aggravation of asthma, chronic and acute bronchitis, irregular heartbeats and heart attacks, and even premature death in people with heart or lung disease.

- Acid gases, such as NO_x and SO_2, may produce both temporary and long-term respiratory symptoms, such as shortness of breath, changes in airway responsiveness, and increased susceptibility to respiratory infection. Additionally, NO_x reacts in air to form ground-level ozone and fine particle pollution which are both associated with adverse health effects. SO_2 also can be react in the air to form fine particle pollution. Both NO_x and SO_2 are major precursors to acid rain which, when deposited, is associated with acidification of soil and surface water.

COST

- EPA estimates that 5 new utility units, 13 new large industrial units, and 4 new small industrial units would be impacted by the proposed NSPS amendments over the next 5 years. The total nationwide annual costs (compared to the existing NSPS) to comply with the proposed amended standards will be approximately $4.4 million for utility units and $2.2 million for industrial units.

BACKGROUND

- EPA is under a consent decree to adopt final amendments by February 9, 2006.

- The Clean Air Act requires EPA to review NSPS for utility, industrial, commercial, and institutional steam generating units that reflect the application of emissions controls known as best demonstrated technology.

- Utility NSPS were first established in 1978, and NSPS for large boilers were first established in 1984. The NOx standards were revised for both utility and large boilers in 1997. NSPS for small boilers were established in 1989, and none of the small boiler limits have been amended to date.

FOR MORE INFORMATION

- To download the proposed rules from EPA's web site, go to "Recent Actions" at the following address: *http://www.epa.gov/ttn/oarpg.*

- For further information about the proposed rules, contact Mr. Christian Fellner at EPA's Office of Air Quality Planning and Standards at 919-541-4003.

- For other combustion-related regulations, visit EPA's Combustion Related Rules page at: *http://www.epa.gov/ttn/atw/combust/list.html*.